



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## FLUCTUATION OF THE ATTENTION TO MUSICAL TONES.

By E. B. TITCHENER.

Dr. Heinrich found, in 1898, that minimal tones do not fluctuate ("dass bei Tönen keine Intensitätsschwankungen zu beobachten waren:" see this *Journal*, October, 1899, XI, 119). The tones employed were the high tones of a Galton whistle, and tones from the middle and lower regions of the scale given by organ pipes and wide glass tubes.

In 1899, H. O. Cook, working under my direction, found that fluctuation occurred with the Politzer acoumeter ( $c^2$ ), with an electro-magnetic fork of 512 vs., and with a blown bottle whose tone was approximately that of 256 vs. (*ibid.*, 123).

Dr. Heinrich replied in 1900 (see this *Journal*, April, 1900, XI, 436) that Cook's fluctuations were due to "bruits à peine perceptibles." He also published the results of experiments on perfectly pure tones (the tones of singing flames, placed under certain physical controls), which showed no fluctuation.

We obtained a gas harmonica from Kohl, and standardised the two lower tones as Dr. Heinrich prescribed. The experiments were made under my direct supervision: experimenter, Miss J. A. Cochran, a graduate student in the Psychological Department; observers, Mr. J. D. Speer and Miss E. Parry. Of these, J. D. S. had had special practice with minimal stimuli, and had observed their fluctuation, in various sense departments; E. P. had had only general practice in introspection. Ten series of observations were taken from each observer. *There was no fluctuation.*

I regret that the experiments could not be carried farther. But it is only fair to Dr. Heinrich to publish this confirmation of his statement. The fact (if it prove to be a fact, on farther test) is one of high theoretical importance. The fluctuations have been proved to be independent of peripheral conditions, *e. g.*, in the case of sight; and I am no more able than is Dr. Heinrich to offer an explanation of their absence in the case of pure tones.